REMARKS

Upon entry of this Response, claims 1-23 remain pending in the present patent application. Claims 1-9, 11-12, and 14-23 have been amended herein. Applicant requests reconsideration of the pending claims in view of the following remarks.

In item 3 of the Office Action, claims 1-23 have been rejected under 35 U.S.C. §101 because it is alleged that the claimed invention is directed to non-statutory subject matter. In response to the rejection, Applicant has amended independent claims 1, 4, 5, and 7 to include a processor circuit having a processor and a memory and an authentication system that is stored in the memory and executable by the processor. In addition, independent claims 9, 11, 12, and 14 have been amended so as to recite that various components are executed in a computer system in conjunction with the performance of the steps of the methods described therein. Finally, claims 16-23 have been amended so as to describe the computer program embodied in the computer readable medium that is also executable by a computer system. The remaining claims depend from the above cited claims. In view of the foregoing described amendments, Applicants assert that claims 1-23 are directed to statutory subject matter and Applicant requests that the rejection of these claims be withdrawn.

In item 5 of the Office Action, claims 1, 4, 6-7, 9, 11, 13-14, 16, 19, and 21-22 have been rejected under 35 U.S.C. §102(e) as being anticipated by 6,446,204 issued to Pang et al. (hereafter "*Pang*"). Anticipation under §102 "requires the disclosure in a single prior art reference of each element of the claim under construction. W.L. Gore & Associates, Inc. v. Garlock, Inc., 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). For the reasons that follow Applicants request that the rejection of claims 1, 4, 6-7, 9, 11, 13-14, 16, 19, and 21-22 be withdrawn.

To begin, claim 1 as amended recites as follows:

> 1. A system for authentication, comprising:
> a processor circuit having a processor and a memory;
> an authentication system stored in the memory and executable by the processor, the authentication system comprising:
> a plurality of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task; and
> an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter until all of the authentication agents have been

requested to authenticate the unauthenticated user parameter and the authenticated user parameter is authenticated by at least one of the authentication agents, unless one of the authentication agents fails to authenticate the unauthenticated user parameter.

As set forth above, the authentication manager requests each of the authentication agents to authenticate an unauthenticated user parameter until all of the authentication agents have been requested to authenticate the unauthenticated user parameter and the authenticated user parameter is authenticated by at least one of the authentication agents, unless one of the authentication agents failed to authenticate the unauthenticated user parameter. In this respect, all of the authentication agents are requested to authenticate a given parameter as multiple agents may be required to authenticate given parameters. For those agents that are not configured to authenticate the specific parameter in question, such agents return an "approved" or "not applicable" designation to the manager to indicate that they do not authenticate the given parameter so the authentication manager moves on to the next agent. Once a given agent fails to authenticate a parameter, then there is no need to inquire with further authentication agents as the user is rejected.

In this respect, *Pang* describes transmitting requests for authentication to predefine ones of a number of authentication "agents". However, requests are not transmitted to each one of the authentication agents as set forth in claim 1. In this respect, *Pang* describes authentication "agents" that are registered with the manager so that the manager knows specifically what type of parameter the given agent authenticates. Thus, in order to add new authentication agents for the authentication of new parameters, the authentication manager itself needs be altered to accommodate the new agents for the new parameters.

In contrast, the present claimed invention describes a more extensible model in which authentication agents that authenticate new parameters are simply added to the system and are discovered by the authentication manager. In this respect, the authentication manager is unchanged and therefore, expansion of the capabilities of the authentication system is much easier to accomplish.

Thus, in view of the amendments to claim 1, Applicants request that the rejection of claim 1 be withdrawn. In addition, Applicants request that the rejection of 9 and 16 be withdrawn for reasons similar in scope with that of claim 1 described

above. In addition, Applicant requests that the rejection of claims 6, 13, and 21 be withdrawn as depending from claims 1, 9, or 16, respectively.

In addition, claim 4 as amended provides as follows:

> 4. A system for authentication, comprising:
> a processor circuit having a processor and a memory;
> an authentication system stored in the memory and executable by the processor, the authentication system comprising:
> a plurality of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task, wherein a parameter type is associated with each of the authentication agents;
> an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter; and
> wherein each of the authentication agents authenticates the unauthenticated user parameter if the unauthenticated user parameter is of the parameter type associated with the respective authentication agent, and each of the authentication agents transmits a message to the authentication manager that causes the authentication manager to proceed with the authentication procedure if the unauthenticated user parameter is not of the parameter type associated with the respective authentication agent.

In this respect, claim 4 as amended recites that each of the authentication agents transmits a message to the authentication manager that causes the authentication manager to proceed with the authentication procedure if the unauthenticated user parameters not of a parameter type associated with the respective authentication agent. As described in the present specification, the authentication agents may transmit either an "valid" designation or an "not applicable" designation for a given parameter that caused the authentication manager to assume that the agent has been able to successfully authenticate the parameter or, alternatively that the agent does not authenticate the given parameter itself.

The authentication manager thus proceeds with the authentication procedure in that the authentication manager will then request authentication from the next agent, assuming that there are additional agents to request authentication from that have not already been queried. Applicants assert that *Pang* fails to show such an element. Accordingly, Applicants request that the rejection of claim 4 be withdrawn. In addition, Applicants request that the rejection of claims 11 and 19 be withdrawn for the same reasons described above with reference to claim 4.

In addition, claim 7 as amended recites as follows:

> 7. A system for authentication, comprising:
> a processor circuit having a processor and a memory;
> an authentication system stored in the memory and executable by the processor, the authentication system comprising:
> a plurality of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task;
> an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter; and
> wherein, upon startup, the authentication manager is unaware of how many of the authentication agents exist in association with the authentication system and the authentication manager discovers the authentication agents.

As set forth above, the authentication manager requests each of the agents to authenticate an unauthenticated user parameter and, upon start up, the authentication manager is unaware of how many of the authentication agents exist in association with the authentication system and the authentication manager discovers the authentication agents. In this respect, there is no static link between the authentication agents and the authentication manager, where the authentication manager discovers the agents upon start up each time. Thus, in order to add new agents for the authentication of new parameters, one need only stored new agents in the system along with the existing agents without changing or otherwise reprogramming the authentication manager. This is advantageous in that the system is more extensible.

By contrast, *Pang* requires such a static link and the authentication manager includes information as to the existence of the authentication "agents" of *Pang*. Thus, in order to expand the authentication capabilities of the system as described by *Pang*, the authentication managing capability must also be reprogrammed. This results in greater man-hours for proper maintenance and expansion of the system.

Accordingly, Applicants assert that *Pang* fails to show or suggest each of the elements of claim 7, as amended. In addition, Applicants request that the rejection of claims 14, and 22 be withdrawn for reasons similar in scope with that of claim 7 above.

In item 6 of the Office Action, claims 2, 8, 15, 17, and 23 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Pang. A prima facie case of obviousness is established only when the prior art teaches or suggests all of the

elements of the claims. MPEP §2143.03, In re Rijckaert, 9 F.3d 1531, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). Applicants assert that *Pang* fails to show or suggest each of the elements of claims 2 and 17 as depending from claims 1 and 16 for the reasons described above with reference to claims 1 and 16. Accordingly, Applicants request that the rejection of claims 2 and 17 be withdrawn.

In addition, claim 8 recites as follows:

> 8. The system of claim 7, wherein the authentication manager is configured to generate a lookup table listing each of the authentication agents during startup after the authentication agents are discovered.

As set forth above, claim 8 further defines the authentication manager as being configured to generate a look-up table listing each of the authentication agents during the start up after the authentication agents have been discovered. This reflects that there is no static link between the authentication manager and the authentication agents where agents are discovered during startup as described above. In contrast, *Pang* describes a system of which such a static link exists, where the agents are neither discovered, nor is a table generated at start up to identify the agents. Rather, the agents have been preprogrammed as a portion of the manager itself, to the extent that *Pang* shows or suggests various entities that may be interpreted as "agents" or "authentication managers".

Therefore, Applicants request that the rejection of claim 8 be withdrawn for the above reasons and for the additional reason that claim 8 depends from claim 7 as described above. In addition, Applicants request that the rejection of claims 15 and 23 be withdrawn for at least the reasons described above with reference to claim 8.

In addition, in item 7 of the Office Action, claims 3, 10, and 18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Pang* as applied to claims 1, 9, and 16, and further in view of U.S. Patent Publication 2002/0069247 filed by Paknad et al. (hereafter "*Paknad*"). A prima facie case of obviousness is established only when the prior art teaches or suggests all of the elements of the claims. MPEP §2143.03, In re Rijckaert, 9 F.3d 1531, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). Applicants note that claims 3, 10, and 18 depend from claims 1, 9, and 16. Accordingly, Applicants assert that the cited combination of references fail to show or suggest each of the elements of claims 3, 10, and 18 as depending from

claims 1, 9, and 16. Accordingly, Applicants request that the rejection of these claims be withdrawn.

Next, in item 8 of the Office Action, claims 5, 12, and 20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Pang* as applied to claims 4, 11, and 19, and further in view of U.S. Patent Publication 2003/0159055 filed by Robbins et al. (hereafter "*Robbins*"). A prima facie case of obviousness is established only when the prior art teaches or suggests all of the elements of the claims. MPEP §2143.03, In re Rijckaert, 9 F.3d 1531, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). Claims 5, 12, and 20 have been amended so as to appear in independent form. Applicants request the rejection of these claims to be withdrawn for the reasons that follow.

To begin, representative claim 5 provides as follows:

> 5. A system for authentication, comprising:
> a processor circuit having a processor and a memory;
> an authentication system stored in the memory and executable by the processor, the authentication system comprising:
> a plurality of authentication agents, each of the authentication agents authenticating at least one user parameter by performing at least one authentication task, wherein a parameter type associated with each of the authentication agents; and
> an authentication manager that requests each of the authentication agents to authenticate an unauthenticated user parameter
> wherein each of the authentication agents authenticates the unauthenticated user parameter if the unauthenticated user parameter is of the parameter type associated with the respective authentication agent; and
> wherein:
> each of the authentication agents transmits an invalid response to the authentication manager upon a failure to authenticate the unauthenticated user parameter;
> each of the authentication agents transmits a valid response to the authentication manager upon a successful authentication of the unauthenticated user parameter; and
> each of the authentication agents transmits a valid response to the authentication manager if the unauthenticated user parameter is of a parameter type that is different than the parameter type associated with the respective authentication agent.

As set forth above, each of the authentication agents transmits an invalid response to the authentication manager upon a failure to authenticate the parameter,

each of the agents transmits a valid response upon a successful authentication of the parameter, and each of the agents transmits a valid response to the authentication manager if the unauthenticated user parameters of a parameter type that is different than the parameter type associated with the respective agent. In this respect, the authentication manager receives valid responses from each authentication agent for a given parameter regardless of whether the agents are configured to authenticate the given parameter. This facilitates the extensibility of the system in that no static link exists between the manager and the agents as described above.

Applicants assert that the *Pang* fails to show or suggest such a feature. In particular, *Pang* does not show the transmission of a valid response when an agent does not authenticate a given parameter as claimed because *Pang* describes a system in which authentication requests are not transmitted to "agents" that do not authenticate a given parameter in contrast to the agents of the present invention as described in the above claims.

In addition, *Robbins* fails to show or suggest at least this feature. In particular, the Office Action states in this regard:

> "Pang et al. Do not expressly disclose each of the authentication agents transmits a valid response to the authentication manager if the unauthenticated user parameter is of a parameter type that is different than the parameter type associated with the respective authentication agent. However, Robbins et al. Disclose an error message is returned to indicate that validation is not possible **[i.e., If the verification agent is unable to verify itself, an error message is returned in block P435. If the verification agent is able to verify itself, the process continues to the next step in block P440 (Lines [0032])]**." (Office Action pages 18-19.)

Applicants respectfully disagree. In particular, paragraph 32 of *Robbins* states as follows:

> "[0032] After the verification agent finds the unique identification names related to itself and other predefined components, the verification agent proceeds with first the verification of itself, as shown in block **P430**, and then the verification of the other predefined components, as shown in block **P440**. In block **P430**, the verification agent first retrieves the keys and other information needed to proceed with the verification of itself. The verification agent may, for example, ensure its own integrity by validating its own digital signature associated with the unique identification name. If the verification agent is unable to verify itself, an error message is returned in block **P435**. If the verification agent is able

> to verify itself, the process continues to the next step in block **P440**. After the verification agent verifies itself, keys and other related license information pertinent to the predefined components are used to proceed with the verification of the other components. This information may be retrieved along with the keys and other information needed to verify the verification agent, or it may be retrieved at a later stage. Once the component license information is retrieved, verification of the predefined components proceeds."

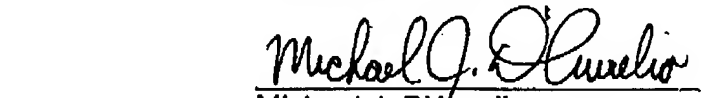
As set forth above, *Robbins* describes the verification of an agent by itself. In this respect, Robbins can not be reasonably interpreted to describe the transmission of a validity message to anything that may be interpreted as an authentication manager when the agent does authenticate the given type of authentication parameter for which authentication is sought.

Accordingly, Applicants request that the rejection of claim 5 be withdrawn. In addition, Applicants request that the rejection of claims 12 and 20 be withdrawn as incorporating subject matter similar in scope with that of claim 5.

CONCLUSION

Applicants respectfully request that all outstanding objections and rejections be withdrawn and that this application and all presently pending claims be allowed to issue. If the Examiner has any questions or comments regarding this response, the Examiner is encouraged to telephone the undersigned counsel of Applicants.

Respectfully submitted,



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